

The diagram illustrates a decoder system for a convolutional code. It consists of several interconnected blocks:

- Roots ROM 210:** Receives α 215 and provides inputs to the Syndrome generators.
- Syndrome generators 220:** A series of blocks that take inputs from the Roots ROM and the received signal $r(x)$ 122. They output syndromes s_j 222.
- Syndrome Computer 240:** A dashed box containing the syndrome generators and a feedback loop from the Decoder.
- Decoder 130:** Receives the syndromes s_j 222 and the generator polynomial $g(x)$ 114. It outputs the decoded signal $\hat{s}(x)$ 132.
- Syndrome Processor 230:** Receives the syndromes s_j 222 and the generator polynomial $g(x)$ 114. It outputs the decoded signal $\hat{s}(x)$ 132.
- Feedback loop:** The decoded signal $\hat{s}(x)$ 132 is fed back through the Syndrome Computer 240 to the Syndrome generators 220.

FIG. 2



FIG. 3

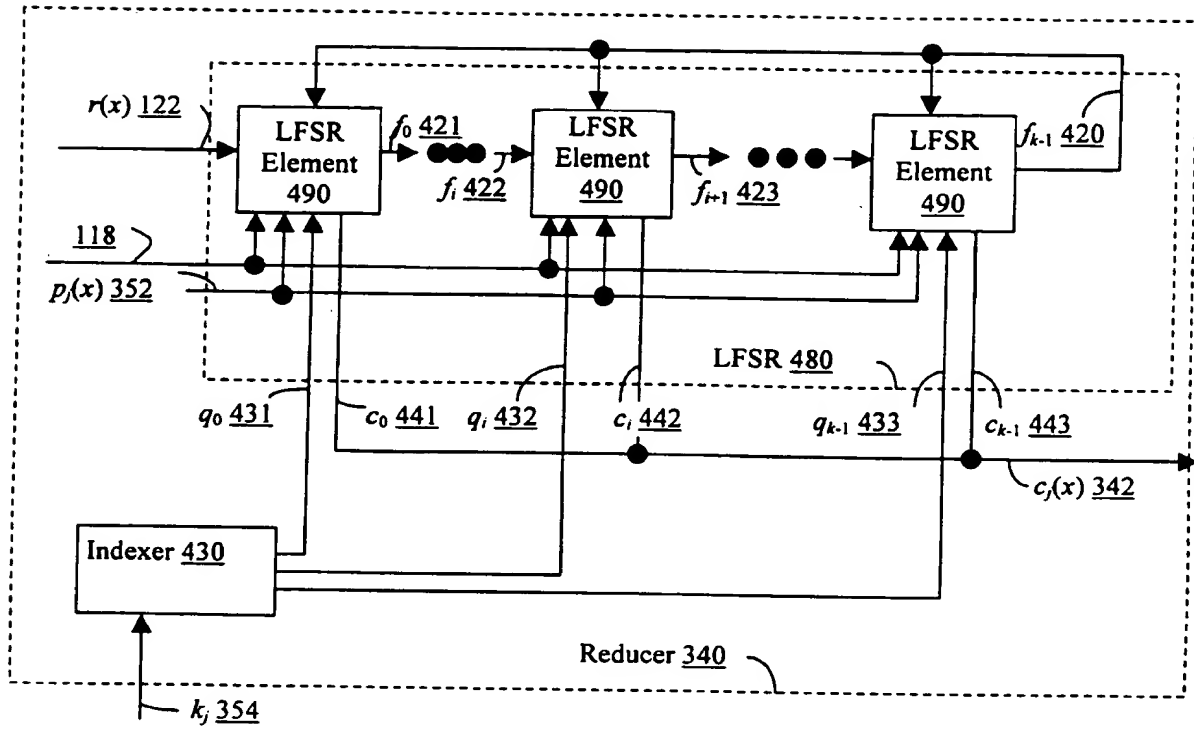


FIG. 4



FIG. 5

← 600

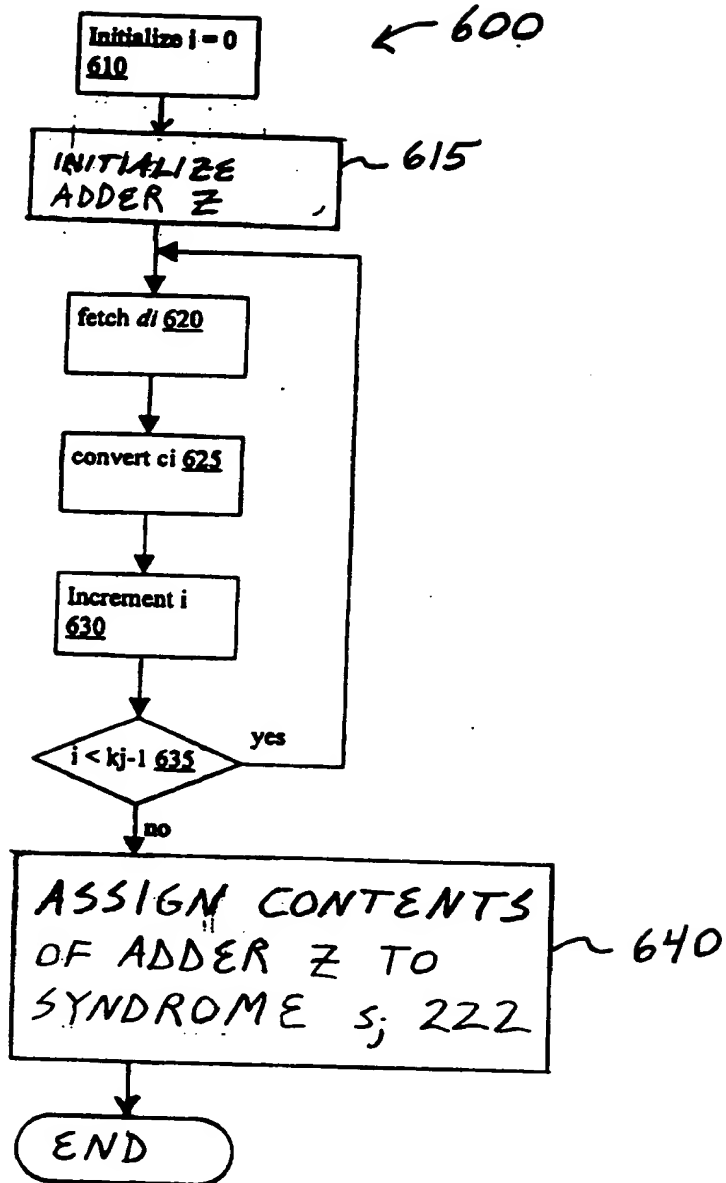


FIG. 6

240

← 700

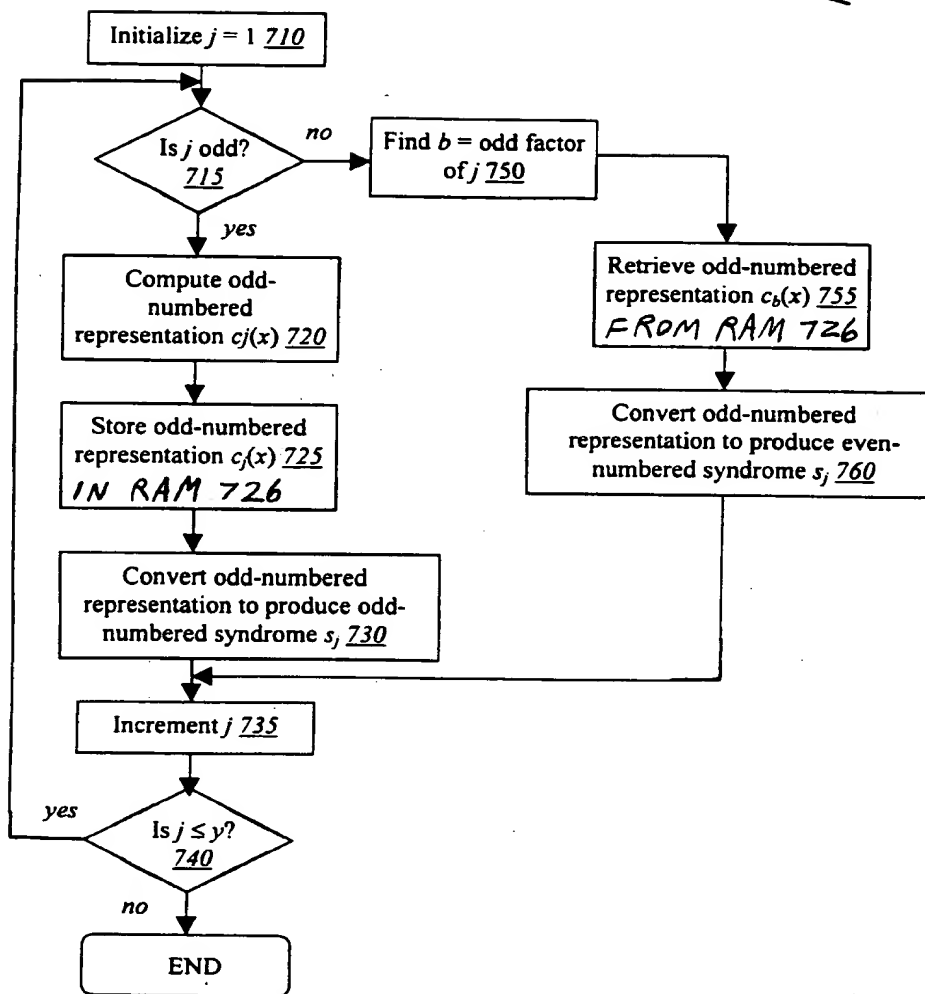


FIG. 7